

CLAIMS

We claim :

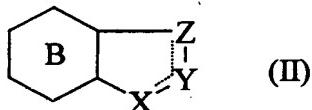
a 1. A compound ^{selected from those} of formula (I) :



wherein :

◆ A represents :

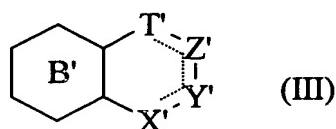
— a ring system of formula (II) :



wherein • X represents oxygen, sulphur or nitrogen or $C(H)_q$ (wherein q is 0, 1 or 2) or NR_0 (wherein R_0 represents hydrogen, linear or branched (C_1-C_6)alkyl, aryl, aryl- (C_1-C_6) alkyl in which the alkyl moiety is linear or branched) or SO_2Ph ,
• Y represents nitrogen or $C(H)_q$ (wherein q is 0, 1 or 2),
• Z represents nitrogen or $C(H)_q$ (wherein q is 0, 1 or 2),
but X, Y and Z cannot represent three hetero atoms simultaneously,
• B represents benzene or pyridine,
• the symbol means that the bonds may be single or double, it being understood that the valency of the atoms is respected,

wherein R substitutes the ring B and R' substitutes the ring containing X, Y and Z, or R and R' substitute the ring B,

— a ring system of formula (III) :



- wherein • X' represents oxygen or sulphur or C(H)_q (wherein q is 0, 1 or 2),
• Y' represents C(H)_q (wherein q is 0, 1 or 2) or NR₀ wherein R₀ is as defined
hereinbefore,
• Z' represents C(H)_q (wherein q is 0, 1 or 2) or NR₀ wherein R₀ is as defined
hereinbefore,
• T' represents oxygen or sulphur or C(H)_q (wherein q is 0, 1 or 2),

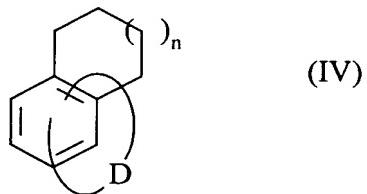
5

it being understood that, when Y' or Z' represents a hetero atom, the other three variables ((X', Z', T') and (X', Y', T'), respectively) cannot represent a hetero atom,

- 10
15
20
- the symbol is as defined hereinbefore,
 - B' represents : * benzene,
 - * naphthalene when X', Y', Z' and T' do not simultaneously represent C(H)_q (wherein q is 0, 1 or 2),
 - * or pyridine when X' and T' simultaneously represent C(H)_q (wherein q is 0, 1 or 2),

wherein R substitutes the ring B' and R' substitutes the ring containing X', Y', Z' and T', or R and R' substitute the ring B',

— a ring system of formula (IV) :

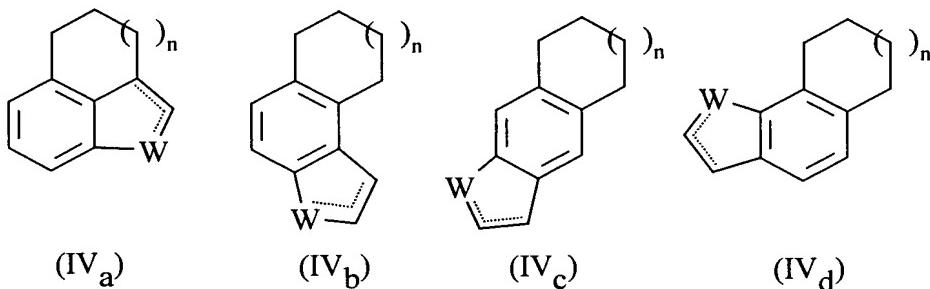


selected from

representing the ring systems (IV_{a-d}) :

Λ

Λ



wherein • n is an integer such that $0 \leq n \leq 3$,

- W represents oxygen, sulphur or nitrogen, or $[C(H)_q]_p$ (wherein q is 0, 1 or 2, and p is 1 or 2) or NR_0 wherein R_0 is as defined hereinbefore,
- the symbol is as defined hereinbefore,

5
a
wherein R' substitutes the ring and R substitutes one or other of the two other rings,
the
Λ

- 10
15
a
— or biphenyl wherein R substitutes one of the benzene rings and R' substitutes the other, or R and R' substitute the same benzene ring,

it being understood that the ring systems of formulae (II), (III) and (IV) and the biphenyl group may be unsubstituted or substituted (in addition to the substituents R and R') by from 1 to 6 radicals, which may be the same or different, selected from R_a , OR_a , COR_a , $COOR_a$, $OCOR_a$, OSO_2CF_3 , cyano, nitro and halogen,

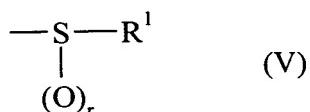
20
a
wherein R_a represents hydrogen, unsubstituted or substituted linear or branched (C_1-C_6)alkyl, unsubstituted or substituted linear or branched (C_2-C_6)alkenyl, unsubstituted or substituted linear or branched (C_2-C_6)alkynyl, linear or branched (C_1-C_6)polyhaloalkyl, unsubstituted or substituted (C_3-C_8)cycloalkyl, unsubstituted or substituted (C_3-C_8)cycloalkyl-(C_1-C_6)alkyl in which $\overset{\text{the}}{\Lambda}$ alkyl $\overset{\text{group}}{\Lambda}$ is linear or branched, unsubstituted or substituted (C_3-C_8)cycloalkenyl, unsubstituted or substituted (C_3-C_8)cycloalkenyl-(C_1-C_6)alkyl in which $\overset{\text{the}}{\Lambda}$ alkyl $\overset{\text{group}}{\Lambda}$ is linear or branched, aryl, aryl-(C_1-C_6)alkyl in which the alkyl moiety is linear or branched, aryl-(C_1-C_6)alkenyl in which the alkenyl moiety is linear or branched, heteroaryl, heteroaryl-(C_1-C_6)alkyl in which the alkyl moiety is linear or

branched, heteroaryl-(C₁-C₆)alkenyl in which the alkenyl moiety is linear or branched, unsubstituted or substituted linear or branched (C₁-C₆)heterocycloalkyl, unsubstituted or substituted heterocycloalkenyl, substituted or unsubstituted heterocycloalkyl-(C₁-C₆)alkyl in which the alkyl moiety is linear or branched, or substituted or unsubstituted heterocycloalkenyl-(C₁-C₆)alkyl in which the alkyl moiety is linear or branched,

5

◆ R represents :

- a group of formula (V) :



wherein • r is an integer such that $0 \leq r \leq 2$,

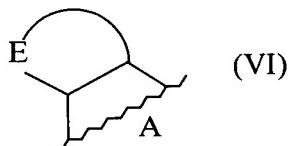
- R¹ represents halogen, R_a, OR_a, COR_a or COOR_a, wherein R_a is as defined hereinbefore,

it being understood that R cannot represent SO_3H ,

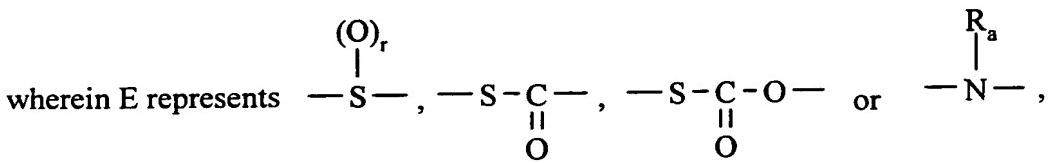
- $\text{-NR}'_a\text{R}''_a$ wherein R'_a and R''_a , which may be the same or different, may take any of the values of R_a and also may form, together with the nitrogen atom carrying them, a 5- to 10-membered cyclic group which may contain, in addition to the nitrogen atom, from one to three hetero atoms selected from oxygen, sulphur and nitrogen,

— or, when A represents a ring system of formula (II) or (III) or a biphenyl group, forms, together with two adjacent carbon atoms of the cyclic structure A carrying it,

a ring of formula (VI) :



20

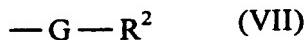


wherein r and R_a are as defined hereinbefore,

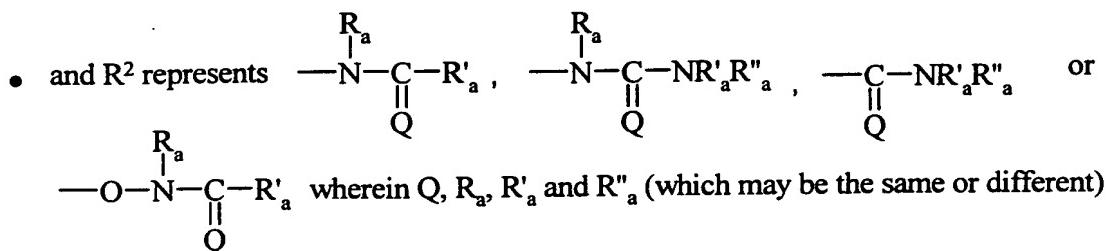
the ring formed containing from 5 to 7 atoms and it being possible for the said ring to contain from 1 to 3 hetero atoms selected from nitrogen, sulphur and oxygen, and one or more unsaturations, and being optionally substituted by one or more radicals, which may be the same or different, selected from R_a, OR_a, COR_a, COOR_a, OCOR_a, NR'_aR"_a, NR_aCOR'_a, CONR'_aR"_a, cyano, oxo, SR_a, S(O)R_a, SO₂R_a, CSR_a, NR_aCSR'_a, CSNR'_aR"_a, NR_aCONR'_aR"_a, NR_aCSNR'_aR"_a and halogen,

wherein R_a, R'_a and R"_a, which may be the same or different, may take any of the values of R_a, and R'_a and R"_a may also form, together with the nitrogen atom carrying them, a cyclic group ⁵

◆ and R' represents a group of formula (VII) :



wherein • G represents an alkylene chain -(CH₂)_t- (wherein t is an integer such that 0 ≤ t ≤ 4), optionally substituted by one or more radicals, which may be the same or different, selected from R_a, OR_a, COOR_a, COR_a (wherein R_a is as defined hereinbefore) and halogen,



are as defined hereinbefore, it being possible for R'_a and R"_a to form, together with the nitrogen atom carrying them, a cyclic group as defined hereinbefore,

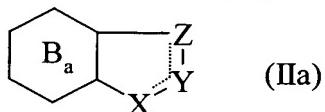
it being understood that :

- 5
- 10
- 15
- 20
- 25
- "heterocycloalkyl" is taken to mean any saturated mono- or poly-cyclic group containing from 5 to 10 atoms containing from 1 to 3 hetero atoms selected from nitrogen, oxygen and sulphur,
 - "heterocycloalkenyl" is taken to mean any non-aromatic mono- or poly-cyclic group containing one or more unsaturations, containing from 5 to 10 atoms and which may contain from 1 to 3 hetero atoms selected from nitrogen, oxygen and sulphur,
 - the term "substituted" used in respect of the expressions "alkyl", "alkenyl" and "alkynyl" indicates that ^{such} the groups ~~in question~~ are substituted by one or more radicals, which may be the same or different, selected from hydroxy, linear or branched (C_1 - C_6)alkoxy, linear or branched (C_1 - C_6)alkyl, linear or branched (C_1 - C_6)polyhaloalkyl, amino and halogen,
 - the term "substituted" used in respect of the expressions "cycloalkyl", "cycloalkylalkyl", "cycloalkenyl", "cycloalkenylalkyl", "heterocycloalkyl", "heterocycloalkenyl", "hetero-cycloalkylalkyl" and "heterocycloalkenylalkyl" indicates that the cyclic moiety of ^{such} the groups ~~in question~~ is substituted by one or more radicals, which may be the same or different, selected from hydroxy, linear or branched (C_1 - C_6)alkoxy, linear or branched (C_1 - C_6)alkyl, linear or branched (C_1 - C_6)polyhaloalkyl, amino and halogen,
 - "aryl" is taken to mean any aromatic, mono- or poly-cyclic group containing from 6 to 22 carbon atoms, and also the biphenyl group,
 - "heteroaryl" is taken to mean any aromatic mono- or poly-cyclic group containing from 5 to 10 atoms containing from 1 to 3 hetero atoms selected from nitrogen, oxygen and sulphur,

it being possible for the "aryl" and "heteroaryl" groups to be substituted by one or more radicals, which may be the same or different, selected from hydroxy, linear or branched (C_1 - C_6)alkoxy, linear or branched (C_1 - C_6)alkyl, linear or branched (C_1 - C_6)polyhaloalkyl, cyano, nitro, amino and halogen,

it being understood that :

- when A represents a ring system of formula (IIa) :

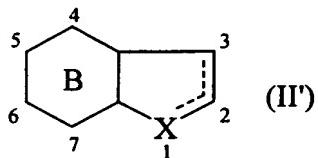


wherein X , Y , Z and the symbol are as defined hereinbefore, B_a represents a benzene nucleus and R represents a group of formula (V), then R' cannot represent $G-R^2$ wherein G represents a single bond ($t=0$) and R^2 represents $-CONR'_aR''_a$ wherein R'_a and R''_a are as defined hereinbefore,

- when A represents a naphthalene nucleus and R represents a group of formula (V), then R' cannot represent $G-R^2$ wherein G represents a single bond ($t=0$) and R^2 represents $-NHCOR_b$ wherein R_b represents a group (C_1-C_4) alkyl or phenol optionally substituted,
- when A represents 1-naphthol and R represents a group of formula (V), then R' cannot represent $G-R^2$ wherein G represents a single bond ($t=0$) and R^2 represents $-CONHR_c$ wherein R_c represents optionally substituted phenyl,
- when A represents a tetrahydronaphthalene nucleus and R represents a group of formula (V), then R' cannot represent $G-R^2$ wherein G represents a single bond ($t=0$) and R^2 represents $-NR_aCOR_d$ wherein R_d represents $(C_3-C_8)cycloalkyl$,
- when A represents an indole nucleus substituted in the 2-position by optionally substituted phenyl, then R^2 cannot represent $-NHCOR_e$ wherein R_e is a group containing an aromatic or non-aromatic mono- or bi-cyclic heterocycle,
- the compound of formula (I) cannot represent :
 - * $N\{-2-[4-methylthio]-1H-3-indolyl\}ethyl\}formamide$
 - * $2-(acetylamino)-3-\{7-[(2-hydroxyethyl)thio]-1H-3-indolyl\}propanamide$
 - * $2-(acetylamino)-3-\{2,7-di[(2-hydroxyethyl)thio]-1H-3-indolyl\}propanamide$,

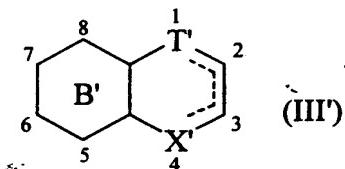
its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

2. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') :



wherein B, X and the symbol are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

3. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') :

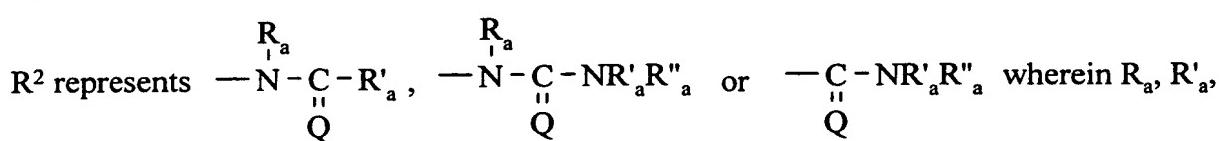


wherein B', X', T and the symbol are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

4. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') substituted in the 5-position by R as defined in claim 1 and in the 3-position by R' as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

5. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') substituted in the 7-position by R as defined in claim 1 and in the 1- or 2-position by R' as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

6. A compound of formula (I) according to claim 1, wherein R represents a group of formula (V), its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
7. A compound of formula (I) according to claim 1, wherein R represents a group of formula (VI), its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
8. A compound of formula (I) according to claim 1, wherein R represents $NR'_aR''_a$ wherein R'_a and R''_a are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
9. A compound of formula (I) according to claim 1, wherein R represents a group of formula (V) wherein r is 0 and R^1 represents R_a as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
10. A compound of formula (I) according to claim 1, wherein R represents $NR'_aR''_a$ wherein R'_a and R''_a are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
11. A compound of formula (I) according to claim 1, wherein R represents a group of formula (VI) wherein E represents $\begin{array}{c} S \\ | \\ (O)_r \end{array}$ or $\begin{array}{c} N \\ | \\ R_a \end{array}$ wherein r and R_a are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
12. A compound of formula (I) according to claim 1, wherein R' represents $G-R^2$ wherein G represents an unsubstituted or substituted alkylene chain $-(CH_2)_t-$, wherein t is 2 or 3, and

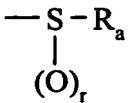


R^{"a} and Q are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

13. A compound of formula (I) according to claim 1, wherein R' represents G-R² wherein G represents an alkylene chain -(CH₂)_t-, wherein t is 2 or 3, and R² represents -NHCOR'_a or -CONHR'_a wherein R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
14. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') and R represents a group of formula (V), its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
15. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') and R represents -NR'_aR^{"a}, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
16. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') and R represents a group of formula (VI), its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
17. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') and R represents a group of formula (V), its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
18. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') and R represents -NR'_aR^{"a}, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
19. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') and R represents a group of formula (VI), its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

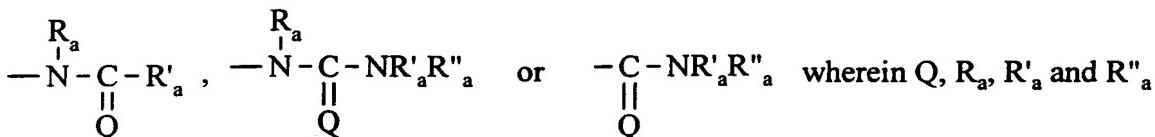
- a 20. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') substituted in the 5-position by a group of formula (V) and in the 3-position by a group of formula (VII); its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 21. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') substituted in the 5-position by $-NR'_aR''_a$ and in the 3-position by a group of formula (VII); its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 22. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') substituted in the 4-5-position by a group of formula (VI) and in the 3-position by a group of formula (VII); its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 23. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') substituted in the 7-position by a group of formula (V) and in the 1- or 2-position by a group of formula (VII); its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 24. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') substituted in the 7-position by $-NR'_aR''_a$ and in the 1- or 2-position by a group of formula (VII); its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 25. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') substituted in the 7-8-position by a group of formula (VI) and in the 1- or 2-position by a group of formula (VII); its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

- a 26. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II'), which is substituted in the 5-position by a group of formula



wherein r and R_a are as defined in claim 1

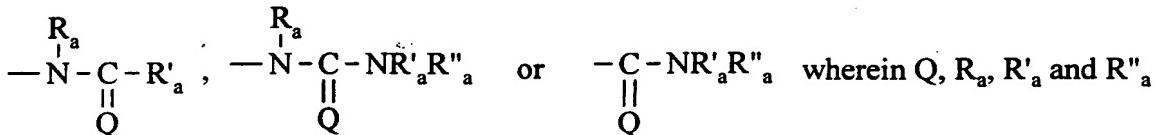
and substituted in the 3-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(\text{CH}_2)_t-$, wherein t is 2 or 3, and R² represents



are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

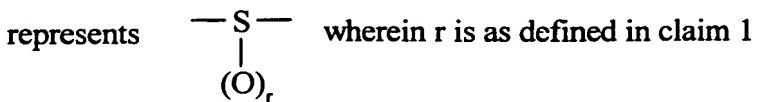
- a 27. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II'), which is substituted in the 5-position by a group of formula $-\text{NR}'_a\text{R}''_a$ wherein R_a and R'_a are as defined in claim 1

and substituted in the 3-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(\text{CH}_2)_t-$, wherein t is 2 or 3, and R² represents

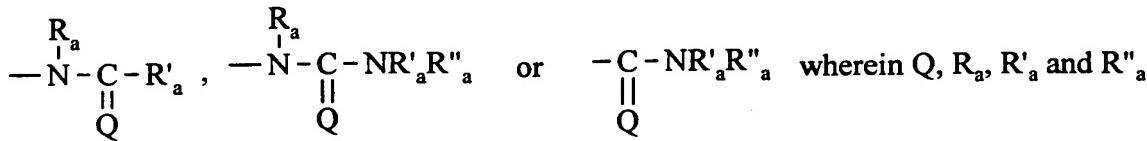


are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

- a 28. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II') substituted in the 4-5-position by a group of formula (VI) wherein E represents

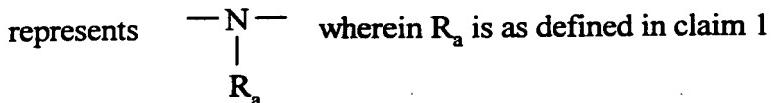


and which is substituted in the 3-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(\text{CH}_2)_t-$, wherein t is 2 or 3, and R² represents

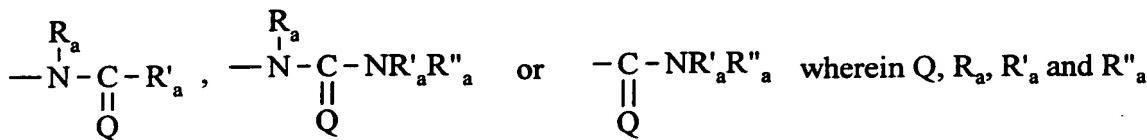


are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

29. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (II'), which is substituted in the 4-5-position by a group of formula (VI) wherein E represents

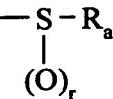


and substituted in the 3-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(\text{CH}_2)_t-$, wherein t is 2 or 3, and R^2 represents



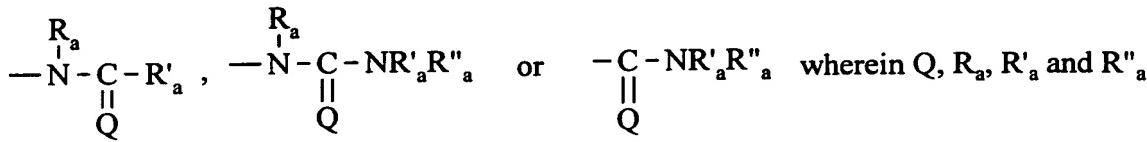
are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

30. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III'), which is substituted in the 7-position by a group of formula



wherein r and R_a are as defined in claim 1

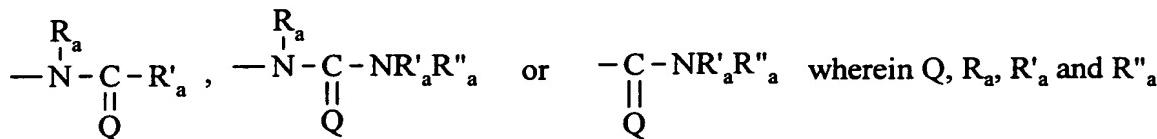
and substituted in the 1- or 2-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(\text{CH}_2)_t-$, wherein t is 2 or 3, and R^2 represents



are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

31. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III'), which is substituted in the 7-position by a group of formula $-NR'_aR''_a$ wherein R'_a and R''_a are as defined in claim 1

and substituted in the 1- or 2-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(CH_2)_t-$, wherein t is 2 or 3, and R² represents

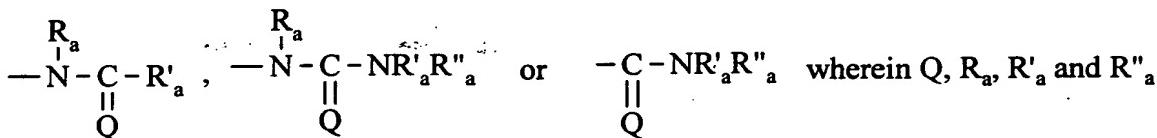


are as defined in claim 1, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

32. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III'), which is substituted in the 7-8-position by a group of formula (VII) wherein

E represents $\begin{array}{c} S \\ | \\ (O)_r \end{array}$ wherein r is as defined in claim 1

and substituted in the 1- or 2-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(CH_2)_t-$, wherein t is 2 or 3, and R² represents

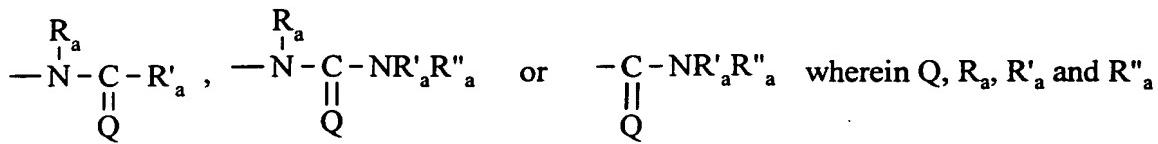


are as defined in claim 1, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

33. A compound of formula (I) according to claim 1, wherein A represents a ring system of formula (III') substituted in the 7-8-position by a group of formula (VI) wherein E represents

$\begin{array}{c} N \\ | \\ R_a \end{array}$ wherein R_a is as defined in claim 1,

and which is substituted in the 1- or 2-position by a group of formula (VII) wherein G represents an unsubstituted or substituted chain $-(CH_2)_t-$, wherein t is 2 or 3, and R^2 represents



are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

34. A compound of formula (I) according to claim 1, wherein A represents naphthalene, dihydro- or tetrahydro-naphthalene, which is optionally substituted (in addition to the substituents R and R'), preferably in the 3-position, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
35. A compound of formula (I) according to claim 1, wherein A represents benzofuran or dihydrobenzofuran, which is optionally substituted (in addition to the substituents R and R'), preferably in the 2-position, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
36. A compound of formula (I) according to claim 1, wherein A represents benzothiophene or dihydrobenzothiophene, which is optionally substituted (in addition to the substituents R and R'), preferably in the 2-position, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
37. A compound of formula (I) according to claim 1, wherein A represents indole or indoline, which is optionally substituted (in addition to the substituents R and R'), preferably in the 2-position, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
38. A compound of formula (I) according to claim 1, wherein A represents azaindole optionally substituted (in addition to the substituents R and R'), preferably in the 2-position, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

- a 39. A compound of formula (I) according to claim 1, wherein A represents naphthalene, dihydro- or tetrahydro-naphthalene, which is optionally substituted (in addition to the substituents R and R') in the 3-position, substituted in the 7-position by —S—R_a wherein r and R_a are as defined in claim 1, and substituted in the 1-position by
$$\begin{array}{c} \text{---S---R}_a \\ | \\ (\text{O})_r \end{array}$$
 -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 40. A compound of formula (I) according to claim 1, wherein A represents benzofuran or dihydrobenzofuran, which is optionally substituted (in addition to the substituents r and R') in the 2-position, substituted in the 5-position by —S—R_a wherein r and R_a are
$$\begin{array}{c} \text{---S---R}_a \\ | \\ (\text{O})_r \end{array}$$
 as defined in claim 1, and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 41. A compound of formula (I) according to claim 1, wherein A represents benzothiophene or dihydrobenzothiophene, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5- position by —S—R_a wherein
$$\begin{array}{c} \text{---S---R}_a \\ | \\ (\text{O})_r \end{array}$$
 r and R_a are as defined in claim 1, and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
- a 42. A compound of formula (I) according to claim 1, wherein A represents indole or indoline, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by —S—R_a wherein r and R_a are as defined in claim 1,
$$\begin{array}{c} \text{---S---R}_a \\ | \\ (\text{O})_r \end{array}$$
 and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2

or 3 and R'a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

43. A compound of formula (I) according to claim 1, wherein A represents azaindole, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by $\begin{array}{c} \text{—S—R}_a \\ | \\ (\text{O})_r \end{array}$ wherein r and R'a are as defined in claim 1, and

substituted in the 3-position by $-(\text{CH}_2)_t\text{-NHCOR}'_a$ or $-(\text{CH}_2)_t\text{-CONHR}'_a$, wherein t is 2 or 3 and R'a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

44. A compound of formula (I) according to claim 1, wherein A represents furopyridine, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by $\begin{array}{c} \text{—S—R}_a \\ | \\ (\text{O})_r \end{array}$ wherein r and R'a are as defined in

claim 1, and substituted in the 3-position by $-(\text{CH}_2)_t\text{-NHCOR}'_a$ or $-(\text{CH}_2)_t\text{-CONHR}'_a$, wherein t is 2 or 3 and R'a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

45. A compound of formula (I) according to claim 1, wherein A represents thienopyridine, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by $\begin{array}{c} \text{—S—R}_a \\ | \\ (\text{O})_r \end{array}$ wherein r and R'a are as defined in

claim 1, and substituted in the 3-position by $-(\text{CH}_2)_t\text{-NHCOR}'_a$ or $-(\text{CH}_2)_t\text{-CONHR}'_a$, wherein t is 2 or 3 and R'a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

46. A compound of formula (I) according to claim 1, wherein A represents naphthalene, dihydro- or tetrahydro-naphthalene, which is optionally substituted (in addition to the substituents R and R') in the 3-position, substituted in the 7-position by $-\text{NR}'_a\text{R}''_a$ wherein R'a and R''a are as defined in claim 1, and substituted in the 1-position by

- ~~-(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~
47. A compound of formula (I) according to claim 1, wherein A represents benzofuran or dihydrobenzofuran, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by -NR'_aR"_a wherein R'_a and R"_a are as defined in claim 1, and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~
48. A compound of formula (I) according to claim 1, wherein A represents benzothiophene or dihydrobenzothiophene, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by -NR'_aR"_a wherein R'_a and R"_a are as defined in claim 1, and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~
49. A compound of formula (I) according to claim 1, wherein A represents indole or indoline, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by -NR'_aR"_a wherein R'_a and R"_a are as defined in claim 1, and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~
50. A compound of formula (I) according to claim 1, wherein A represents azaindole, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by -NR'_aR"_a wherein R'_a and R"_a are as defined in claim 1, and substituted in the 3-position by -(CH₂)_t-NHCOR'_a or -(CH₂)_t-CONHR'_a, wherein t is 2 or 3 and R'_a is as defined in claim 1, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

51. A compound of formula (I) according to claim 1, wherein A represents furopyridine, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by $-\text{NR}'_a\text{R}''_a$ wherein R'_a and R''_a are as defined in claim 1, and substituted in the 3-position by $-(\text{CH}_2)_t\text{-NHCOR}'_a$ or $-(\text{CH}_2)_t\text{-CONHR}'_a$, wherein t is 2 or 3 and R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
52. A compound of formula (I) according to claim 1, wherein A represents thienopyridine, which is optionally substituted (in addition to the substituents R and R') in the 2-position, substituted in the 5-position by $-\text{NR}'_a\text{R}''_a$ wherein R'_a and R''_a are as defined in claim 1, and substituted in the 3-position by $-(\text{CH}_2)_t\text{-NHCOR}'_a$ or $-(\text{CH}_2)_t\text{-CONHR}'_a$, wherein t is 2 or 3 and R'_a is as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
53. A compound of formula (I) according to claim 1, wherein A represents naphthalene, which is optionally substituted (in addition to the substituents R and R') in the 3-position, substituted in the 7-position by $-\text{SAlk}$ wherein Alk represents substituted or unsubstituted linear or branched (C₁-C₆)alkyl, and substituted in the 1-position by $-(\text{CH}_2)_t\text{-NHCOR}'_a$, $-(\text{CH}_2)_t\text{-CONHR}'_a$ or $-(\text{CH}_2)_t\text{-NH-CO-NR}'_a\text{R}''_a$, wherein t is 2 or 3 and R'_a and R''_a are as defined in claim 1, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
54. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylthio)-1-naphthyl]-ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
55. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylthio)-1-naphthyl]-ethyl}butanamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

56. A compound of formula (I) according to claim 1 that is N-{2-[7-methylthio)-1-naphthyl]-ethyl}-1-cyclopropanecarboxamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
57. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylthio)-1-naphthyl]-ethyl}-2,2,2-trifluoroacetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
58. A compound of formula (I) according to claim 1 that is N-methyl-N'-(2-[7-(methylthio)-1-naphthyl]ethyl)urea, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
59. A compound of formula (I) according to claim 1 that is N-{2-[3-benzoyl-7-(methylthio)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
60. A compound of formula (I) according to claim 1 that is N-{2-[3-benzyl-7-(methylthio)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
61. A compound of formula (I) according to claim 1 that is N-{2-[7-(ethylthio)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
62. A compound of formula (I) according to claim 1 that is N-{2-[7-(propylthio)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
63. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylsulphinyl)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

64. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylsulphonyl)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
65. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylthio)-1,2,3,4-tetrahydro-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
66. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylsulphinyl)-1,2,3,4-tetrahydro-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
67. A compound of formula (I) according to claim 1 that is N-{2-[7-(methylsulphonyl)-1,2,3,4-tetrahydro-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
68. A compound of formula (I) according to claim 1 that is N-{2-[7-(benzylthio)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
69. A compound of formula (I) according to claim 1 that is N-{2-[7-(benzylsulphinyl)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.
70. A compound of formula (I) according to claim 1 that is N-{2-[7-(benzylsulphonyl)-1-naphthyl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

71. Compounds of formula (I) according to claim 1 that are : *selected from*
- * N-[2-(7-mercaptop-1-naphthyl)ethyl]benzamide
N-[2-(3-benzyl-7-mercaptop-1-naphthyl)ethyl]-1-cyclohexanecarboxamide
N-[2-(5-mercaptopbenzo[b]furan-3-yl)ethyl]acetamide, and

* N-[2-(2-benzyl-5-mercaptopbenzo[b]furan-3-yl)ethyl]-1-cyclopropanecarboxamide,
their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically
acceptable acid or base.

A c
72. Compounds of formula (I) according to claim 1 that are : selected from

- * N-{2-[7-(allylthio)-1-naphthyl]ethyl}-2-phenylacetamide
- * N-{2-[7-(benzylthio)-1-naphthyl]ethyl}heptanamide
- * N-methyl-2-[7-(cyclopentylthio)-1-naphthyl]acetamide
- * N-cyclohexyl-4-[7-(phenylthio)-1-naphthyl]butanamide
- * N-{2-[7-(allylthio)-3-phenyl-1-naphthyl]ethyl}acetamide
- * N-{2-[7-(benzylthio)-3-phenyl-1-naphthyl]ethyl}acetamide, and
- * N-{3-[7-(1-propenylthio)-1,2,3,4-tetrahydro-1-naphthyl]propyl}acetamide,
their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically
acceptable acid or base.

A c
73. Compounds of formula (I) according to claim 1 that are : selected from

- * N-{{(6-benzylthio)-2-phenyl-2H-3-chromenyl)methyl}acetamide
- * N-{2-[5-(2-pyridylthio)benzo[b]furan-3-yl]ethyl}acetamide
- * N-{[2-benzyl-5-(3-butenylthio)benzo[b]thiophen-3-yl]methyl}acetamide
- * N-{2-[5-(allylthio)-2-benzylbenzo[b]furan-3-yl]ethyl}-1-cyclopropanecarboxamide
- * N-{2-[5-(propylthio)-2-phenylbenzo[b]thiophen-3-yl]ethyl}acetamide
- * N-{2-[5-(isopentylthio)benzo[b]thiophen-3-yl]ethyl}acrylamide, and
- * N-{[2-(2-furylmethyl)-5-(2-propynylthio)benzo[b]furan-3-yl]methyl}acetamide,
their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically
acceptable acid or base.

74. A compound of formula (I) according to claim 1 that is N-{2-[1-methyl-2-phenyl-5-(propylthio)-1H-pyrrolo[2,3-*b*]pyridin-3-yl]ethyl}acetamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

75. A compound of formula (I) according to claim 1 that is N-[4-(butylthio)-2,3-dihydro-1H-2-phenalenyl]propanamide, its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.

A c selected from
76. Compounds of formula (I) according to claim 1 that are:

76. Compounds of formula (I) according to claim 1 that are:

* ethyl 10-{3-[(cyclohexylcarbonyl)amino]propyl}-1-methyl-3H-benzo[f]thiochromene-3-carboxylate

* N-[3-(1-oxo-2,3,7,8,9,10-hexahydro-1*H*-benzo[*f*]thiochromen-10-yl)propyl]acetamide, and

* N-[2-(3*H*-benzo[*f*]thiochromen-10-yl)ethyl]-2-bromoacetamide,

~~their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

A c selected from
77. Compounds of formula (I) according to claim 1 that are:

- * N-[(2-benzyl-8,9-dihydro-7H-thieno[3,2-f]thiochromen-1-yl)methyl]acetamide

* N-[3-(7-methyl-7*H*-thiochromeno[6,5-*b*]furan-1-yl)propyl]acetamide, and

* N-methyl-4-(8-hydroxy-7,7-dimethyl-7,8-dihydrothieno[3',2':3,4]benzo[f]furan-1-yl)-butanamide,

~~their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

A c selected from
78. Compounds of formula (I) according to claim 1 that are:

- * N-[2-[7-amino-3-(cyclopropylmethyl)-1-naphthyl]ethyl]acetamide

* N-{2-[7-(diethylamino)-1-naphthyl]ethyl}-2-phenylacetamide

* N-{2-[7-(hexylamino)-1,2,3,4-tetrahydro-1-naphthyl]ethyl}acetamide, and

* N-[(6-morpholino-2-phenyl-2H-3-chromenyl)methyl]acetamide,

~~their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

A C selected from
79. Compounds of formula (I) according to claim 1 that are:

- * N-[2-(3-benzyl-3H-benzo[e]indol-9-yl)propyl]-1-cyclohexanecarboxamide

ethyl 9-[2-(phenylacetylamino)ethyl]-1-methyl-3H-benzo[e]indole-2-carboxylate

- * N-[2-(4-methyl-1,2,3,4-tetrahydro[*f*]quinolin-10-yl)ethyl]-2-phenylacetamide, *and*
* N-[2-(1-hydroxy-4-methyl-1,2,3,4-tetrahydrobenzo[*f*]quinolin-10-yl)ethyl]-2-phenyl-
acetamide,

~~their enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

80. A compound of formula (I) according to claim 1 that is N-[(2-benzyl-6-ethyl-6,7-dihydrothieno[3,2-*f*]quinolin-1-yl)methyl]acetamide, ~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base.~~

81. A compound of formula (XX_A) according to claim 74, a particular case of the compounds of formula (XX) :

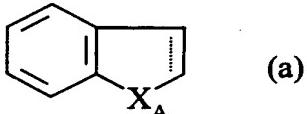


wherein :

◆ Hal represents halogen (fluorine, chlorine, bromine, iodine),

◆ A_A represents :

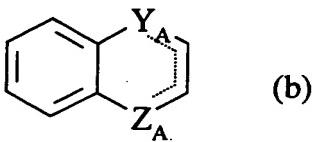
— a ring system of formula (a) :



wherein X_A represents sulphur or C(H)_q (wherein q is 0, 1 or 2) or NR₀ (wherein R₀ is as defined hereinbefore), and the symbol is as defined hereinbefore,

wherein the halogen atom substitutes the benzene nucleus and R'_A substitutes the 5-membered ring,

— or a ring system of formula (b) :

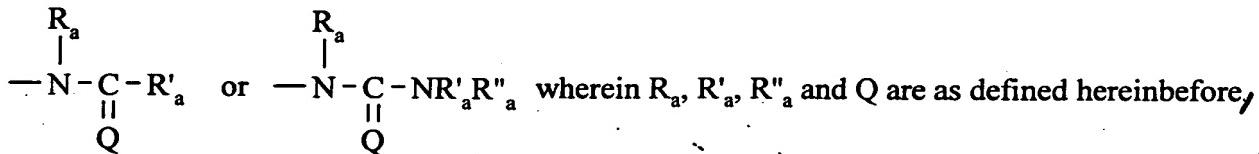


wherein Y_A and Z_A , which may be the same or different, represent oxygen or sulphur or $C(H)_q$ (wherein q is 0, 1 or 2), and the symbol is as defined hereinbefore,

wherein the halogen atom substitutes the benzene nucleus and R'_A substitutes one or other of the two rings,

which ring systems of formula (a) or (b) may be substituted (in addition to the halogen atom and the group R'_A) by one or more groups selected from R_a , COR_a , $COOR_a$, $OCOR_a$ wherein R_a is as defined hereinbefore,

◆ and R'_A represents $G-R^2_A$ wherein G is as defined hereinbefore and R^2_A represents



~~its enantiomers and diastereoisomers, and addition salts thereof with a pharmaceutically acceptable acid or base,~~

as synthesis intermediates but also as compounds for use in the treatment of disorders associated with the melatoninergic system.

82. A method for treating a living body afflicted with disorders of the melatoninergic system comprising the step of administering to the living body an amount of a compound of claim~~s~~ ^{animal} 1 to ~~81~~ ^{animal} which is effective for the alleviation for said ^{disorder} ~~condition~~.

83. A pharmaceutical composition useful for treating melatoninergic disorders comprising, as active principle an effective amount of a compound as claimed in claim~~s~~ 1 to ~~81~~ ^{animal}, together with one or more pharmaceutically-acceptable excipients or vehicles.